Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Modified Estimate for Improvements to roads and Drains at Ambedkarnagara and Kanakanagara areas in ward no-04 of Yelahanka Satellite Town Sub Division

	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33)								
		Sqm							
							0.00	116.81	0.00
2	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(I No-19.1, P No-143), 8km lead								
		Cum							
	RCC Drain								
	Ambedkarnagara								
	15th A cross	LHS	1	267.30	1.50	1.20	481.14		
	1st main road		1	118.60	1.80	1.20	256.18		
	Culvert		4	5.45	1.80	1.00	39.24		
	Temple Road		1	51.00	1.80	1.20	110.16		
			1	80.00	1.10	1.10	96.80		
	Desilt								
	15th A cross	RHS	1	192.70	0.80	0.70	107.91		
	Debris		1	24.00	4.00	0.30	28.80		
							1120.23		
			Upto 125%				1098.49	225.94	248192.27
			Above 125%				21.74	225.94	4,912.05
	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
				Area					
3	a) 40mm Jelly	Cum	0	0.31		0.40	0.00	1995.10	0.00
4	b) 20mm Jelly	Cum	0	0.31		0.40	0.00	1995.10	0.00
5	c) Coarse sand.	Cum	0	0.31		0.30	0.00	2782.22	0.00
6	d) Fine Sand	Cum	0	0.31		0.20	0.00	2782.22	0.00
7	e) 12.5mm chips	Cum	0	0.31		0.30	0.00	1995.10	0.00

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
upplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with atest amendments and conveyingto work site including loading and unloading at both destinations nd rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving ydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0, 630 mm dia.** (Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 Code No. K010Q)								
	Rmt							
0.63m dia HDPE Perforated		0	1.80			0.00		
						0.00	**11358.02**	**0.00**
Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified indrawings or as approved by Engineer Incharge. Data Rate								
Data rate	74.55		Area					
	Sqm	0	0.31			**0.00**	**74.55**	**0.00**
KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
	Cum							
RCC Drain								
Ambedkarnagara								
15th A cross	LHS	1	267.30	1.50	0.15	60.14		
1st main road		1	118.60	1.80	0.15	32.02		
Temple Road		1	51.00	1.80	0.15	13.77		
Culvert		4	5.45	1.80	0.15	5.89		
		1	80.00	1.10	0.15	13.20		
For Kerb stone								
For surround bench		10	6.40	0.20	0.10	1.28		
Ambedkarnagara								
15th A cross	LHS	1	331.80	0.20	0.10	6.64		
15th A cross	RHS	1	228.30	0.20	0.10	4.57		
						137.50	**5690.28**	**782427.73**
Providing and laying plain/reinforced cement concrete for side drains using **M20 nominal mix concrete with OPC at 300 kgs.** With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)								
	Cum							
RCC Drain								
Raft								
Ambedkarnagara								

	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	1st main road								
	Temple Road		1	118.60	1.50	0.20	35.58		
			1	51.00	1.50	0.20	15.30		
	Wall		1	80.00	0.90	0.15	10.80		
	Ambedkarnagara								
	15th A cross	LHS	2	267.30	0.23	0.80	98.37		
	1st main road		2	118.60	0.25	0.90	53.37		
	Temple Road		2	51.00	0.23	0.90	21.11		
			2	80.00	0.15	0.65	15.60		
	Culvert Raft		4	5.45	1.50	0.20	6.54		
	Culvert Wall		8	5.45	0.23	0.85	8.52		
							329.35		
	Drain Coping								
	15th A cross	RHS	2	192.70	0.20	0.15	11.56		
							340.91	7420.17	2529596.80
12	KSRRB - M2300-14: **Providing TMT steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)								
		Tn							
	RCC Drain								
							31.88		
							31.88	77654.86	2475529.77
13	Providing and Fixing **pre cast covering Slab 100mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
		Sqm							
	RCC Drain								
	Ambedkarnagara								
	15th A cross	LHS	1	247.00	1.20		296.40		
	15th A cross	RHS	1	175.70	1.20		210.84		
			1	63.40	0.90		57.06		
	missing slabs 15th A cross						233.00		
	Shoulder Drain		1	36.00	0.75		27.00		
							824.30		
			Upto 125%				626.25	2452.68	1535990.85
			Above 125%				198.05	2452.68	485753.27
14	Providing and Fixing **pre cast covering Slab 150mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
		Sqm							
	RCC Drain								
	Ambedkarnagara								
	1st main road		1	100.60	1.50		150.90		
	Temple Road		1	51.00	1.50		76.50		
							227.40	2616.40	594969.36

	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
15	Providing and fixing RCC precast cover slab of 250mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
		Sqm							
	Culvert		4	5.45	1.50		32.70		
	Culvert Slab								
	1st main road		1	12.60	1.50		18.90		
							51.60		
				Upto 125%			9.00	5686.19	51,175.71
				Above 125%			42.60	5686.19	242231.69
16	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30)								
		Nos							
	Ambedkarnagara								
	15th A cross	LHS	1	331.80			331.80		
	15th A cross	RHS	1	228.30			228.30		
	For surround bench		10	6.40			64.00		
							624.10		
							1387.00	453.89	629545.43
17	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
	Ambedkarnagara								
	15th A cross	LHS	1	331.80		0.30	99.54		
	15th A cross	RHS	1	228.30		0.30	68.49		
	For surround bench		10	6.40		0.30	19.20		
							187.23	89.00	16,663.47
18	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, mortar, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No-112,I No-								
		Sqm							
	For Benches		10	1.80	1.50		27.00		
							27.00	1370.56	37005.12
19	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305 (P.No.147, I.No.19.60)								
		Cum							
	For Benches		10	1.80	1.50	0.20	5.40		
							5.40	361.55	1952.37
20	Executive Bench- Made out of Sadarahalli grey stone with hand supports with 3 line finishing with arch design with 100mm slabs. Height 90x Length 1500 width 45 cms (Data approved rate)								

	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
		Each							
			10				10.00		
							10.00	19100.90	191009.00
21	**Construction of granular sub-base Grading-V** as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
		Cum							
	Footpath								
	Ambedkarnagara								
	15th A cross	LHS	1	331.80	1.91	0.15	95.11		
	Deduct Tree Guards		-48.00	1.10	1.00	0.15	-7.92		
	15th A cross	RHS	1	202.80	2.13	0.15	64.64		
	Deduct Tree Guards		-8.00	1.00	0.80	0.15	-0.96		
							150.87	2093.67	315878.21
22	KSRB 14.6 : Providing and laying **heavy duty cobble stones** interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications.(I No-20.5,P No-153) heavy duty cobble stones 60mm thick								
		Sqm							
	Footpath								
	Ambedkarnagara								
	15th A cross	LHS	1	331.80	1.91		634.07		
	Deduct Tree Guards		-48.00	1.10	1.00		-52.80		
	15th A cross	RHS	1	202.80	2.13		430.95		
	Deduct Tree Guards		-8.00	1.00	0.80		-6.40		
							1005.82	1171.43	1178247.49
	EIRL								
E1	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	Basic rate	5422.00							
	6% AW	325.32							
	Sub Total	5747.32							
	TP Above 4.95%	284.49							
		6031.81							
	Tree Guards	Cum							
	For P.C.C								
	15th A cross LHS		2	120.00	0.20	0.15	7.20		
	15th A Cross RHS		2	16.80	0.20	0.15	1.01		
	Shoulder Drain		2	35.50	0.20	0.15	2.13		
	Shoulder Drain Bed		1	35.50	0.60	0.15	3.20		

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
						13.53	6031.81	81628.52
KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 I.No.5.26.2, Page no 27								
Basic rate	924.00							
Area Weightage 6%	55.44							
Total	979.44							
TP Above 4.95%	48.48							
	1027.92							
	Sqm							
15th A cross LHS		2	120.00		0.20	48.00		
15th A Cross RHS		2	16.80		0.20	6.72		
Shoulder Drain		2	34.20		0.40	27.36		
						82.08	1027.92	84371.86
							Total Construction Cost	11487080.97
							Miscellaneous & Rounding Off	1,122.86
							Total	11488203.83

1,14,88,200/-

Assistant Engineer
Ward 04
BBMP Bangalore

Asst. Executive Engineer
Yelahanka New Town Sub-Division
BBMP Bangalore

Executive Engineer
Yelahanka Division
BBMP Bangalore

Technical Sanction
Accorded For Rs.11,488,203.83
Head of A/C. 12.3055
CER NO :....91..... : 25.03.2021

[TA] CE (YNK)